

INTRO

THE ANARCHAEA WHITE PAPER

@AeonAnimus - 03.04.25 V.0.1



The great challenge facing the internet today is the construction of a 3D space where communication, commerce, and collective experience can occur.

In other words: The creation of a "METAVERSE"...

ANARCHAEA...

is the working title for an ANARCHO-SCHIZO-METAVERSE...

The nature of **how a METAVERSE is built**, is a question of great personal and societal importance to anyone who uses the internet. If it is constructed by corporations with a profit motive, the environment will be riddled with advertisements, microtransactions and **ultimately have a predatory relationship against users**. If tech companies build a METAVERSE first, and continue their ideological program of regulating and censoring speech for money and power, then the 3D spaces and environs we inhabit in the future **will be DYSTOPIAS where free expression is simply not allowed**.

To avoid this catastrophe, **this white paper proposes that the various sub cultures and factions of the internet join forces**, to build, create, and promote a METAVERSE that is open source, distributed, and thereby free of all attempts at social regulation, market manipulation, and control. **We believe this is the only way to create a truly open and free space on the internet** for the exchange of ideas, and for the free trade and exchange of digital commodities.

This White Paper proposes an organizational strategy for how the internet can collectively finance and build a METAVERSE with a distributed group of artists and developers who are **paid via digital crypto tokens**.

Before we begin, we will familiarize the reader with the basic concept art depicting **the basic building**



blocks and structure of the game.



The proposed system below **creates a complex dynamic virtual environment** that is computationally efficient, and easily understandable and intuitive for new players to grasp within minutes of playing the game.

Development is divided into **9 “Stages” or “Teams”**.

Each Team will focus on a particular aspect of game development that is correlated to 1 of 9 factions.

Teams will coordinate to ensure all game aspects are working in harmony. Users can join and participate in multiple teams as their skills and availability allow.

All Teams are aligned to the 9 color coded factions portrayed above, and will feature in the game itself.

INDEX OF 9 DEVELOPMENT STAGES

TEAM ANARCHY

- a. SOCIAL MEDIA OUTREACH AND CRYPTO COIN LAUNCH
- b. IN-GAME BETA TESTERS AND BUG REPORTERS

2. TEAM PRIMITIVISM

- a. VOXEL GAME ENGINE CORE MECHANICS & PHYSICS
- b. TERRAIN GENERATION MODULE (PROCEDURAL GENERATION)

TEAM MONARCHISM

- CONCEPT ART AND DESIGN
- AUDIO/VIDEO & 3D/2D ASSET CREATION

4. TEAM MUTUALISM

- a. ANIMATION & RIGGING
- b. TEXTURE CREATION & MAPPING

TEAM AGORISM

IN GAME USER INTERFACE
VOXEL STRUCTURE BLUEPRINTS FOR WORLD GEN

TEAM NATIONALISM

BRAND BOOK CREATION AND MARKETING RESEARCH
ADVERTISEMENTS, PARTNERSHIPS, & SOCIAL MEDIA

7. TEAM CAPITALISM

- a. CRYPTO CURRENCY TOKENOMICS AND DESIGN
- b. BOUNTY PAYMENT CONTRACTS

TEAM TRANSHUMANISM

AI INTEGRATION AND BOT/NPC PROGRAMMING
GAME ENGINE OPTIMIZATION AND DEV TOOLS

9. TEAM PACIFISM

- a. DAO VOTING COMMITTEE & FINAL GAME DECISIONS
- b. TEAMS ADMINISTRATION AND COORDINATION

10. CONCLUSION: THE RAINBOW BRIDGE AND THE GAMER GATE

11. MISCELLANEOUS SPECS & NOTES

TEAM ANARCHISM

A: SOCIAL MEDIA OUTREACH & CRYPTO COIN LAUNCH

The first and most important step that must be taken to start this project is to network and develop a community of interested artists, developers, and gamers who want to participate and contribute their talents to the project.

You can help by sharing this white paper online.

Persons who are themselves influential, or in contact with others who are influential, can *share this white paper* and create a network effect that could launch one of *the most ambitious and lucrative projects in the history of cryptographic digital assets.*

If enough interest can be generated, and talent acquired, a **CRYPTO TOKEN** can be launched to begin the process of financing the development of the **CORE GAME ENGINE**, and paying artists to begin the **CONCEPT ART.**

The **CRYPTO CURRENCY TOKENOMICS** & **SOCIAL MEDIA BRAND LAUNCH** will be coordinated with **TEAM CAPITALISM** & **TEAM NATIONALISM**

B: IN-GAME BETA TESTERS AND BUG REPORTERS

Every game needs players who will *play the game* and accurately report bugs, errors, and glitches as they discover them.

When **ANARCHAEA** is playable, the beta testers and bug reporters for new versions will be assigned to **TEAM ANARCHY** and be *eligible for payouts when they report bugs* that are accurate and fixed by a developer.

This faction is also home to the "Ideas Guys"...

SILENCE, Engineer



Ideas guy is talking



TEAM PRIMITIVISM

A: VOXEL GAME ENGINE CORE MECHANICS AND PHYSICS

TEAM PRIMITIVISM; will be responsible for building the physical environment and laws of physics that govern **ANARCHAEA**.

Efficient voxel world generation is called **"GREEDY MESHING"**.

Watch @Vercidium of **SECTOR'S EDGE** demonstrate **"GREEDY MESHING"**:

[I Optimised My Game Engine Up To 12000 FPS](#)

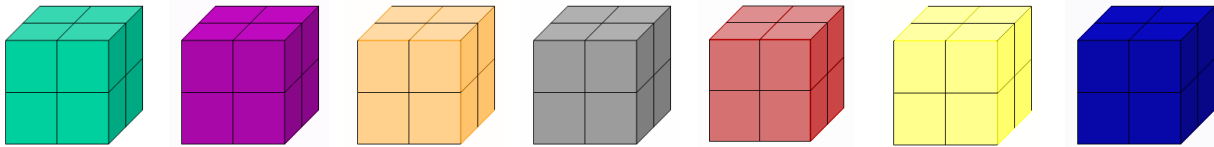
[Sector's Edge - Reveal Trailer](#)

B: TERRAIN GENERATION MODULE (PROC GEN)

Terrain will be procedurally generated using the perlin noise method deployed by **@Notch** in **MINECRAFT**.

[How Do Minecraft Worlds Generate?!](#)

VOXEL BLOCK SIZE will correlate to **~18in. Or a ½ Yard**. This means that roughly **8 Anarchaea voxel blocks** will fit into a minecraft block (1x1x1 meter) evenly.

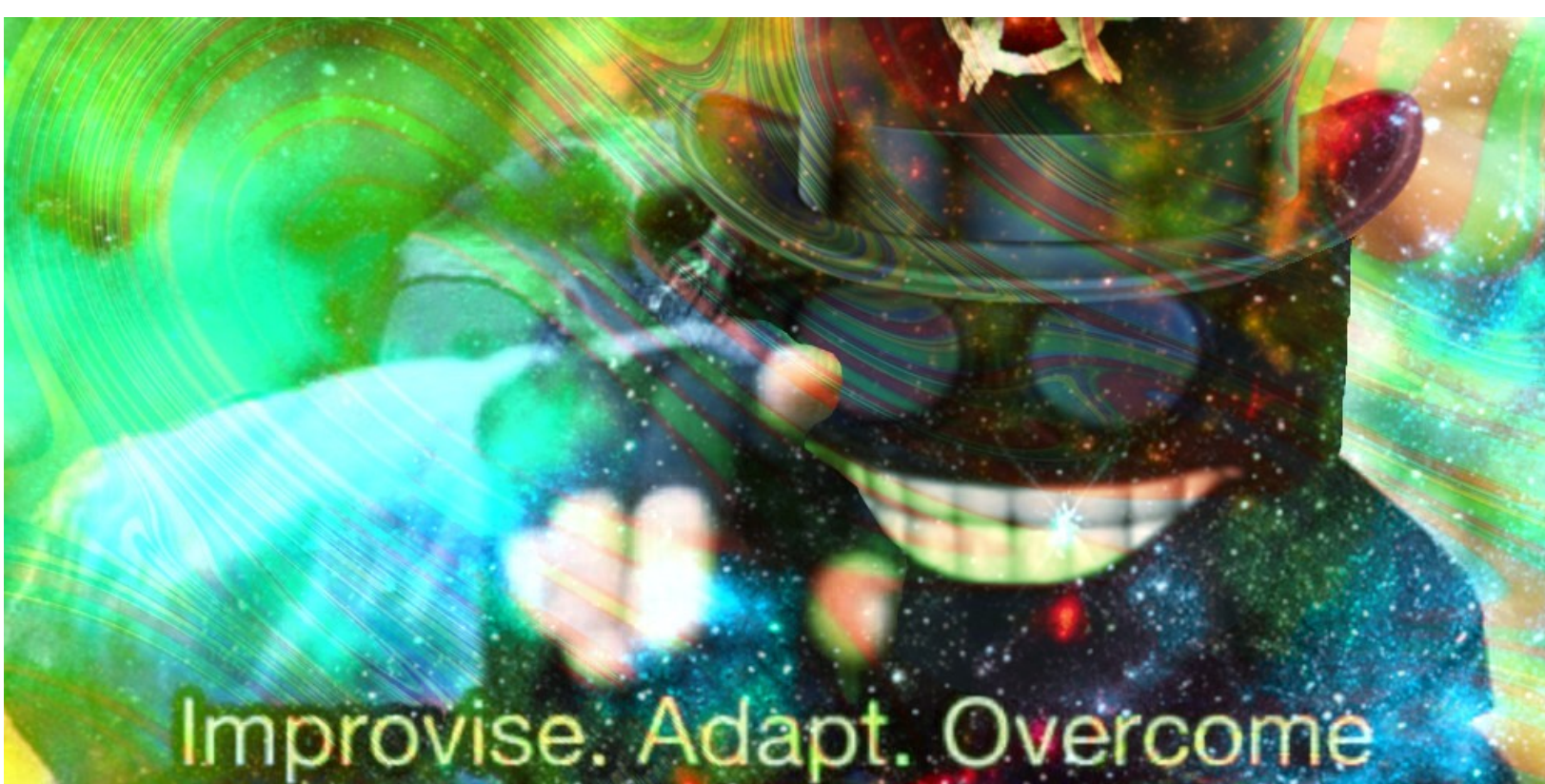


Voxels in **ANARCHAEA** will be called **"Q-Bits"**; an ode to Quantum bits and the ancient Cubit measurement system. The border of every server will be marked by **intentionally generated "FARLANDS" geologic features**:



☒☒☒[Every Minecraft Far Lands, Ever.](#)☒☒☒

All servers in **ANARCHAEA** will be “SHARDED” together in a grid structure similar to a voxel world (x,y). This allows players to travel North, South, East, and West to different servers in the game without a menu.



TEAM MONARCHISM

A: CONCEPT ART AND DESIGN

TEAM MONARCHISM will begin by producing concept art for all game assets.

Concept art must be referenced by artists who produce assets for the game, just like a real game studio.

B: AUDIO/VIDEO & 3D/2D ASSET CREATION

Thousands of media assets are needed to build a functioning game. Artists on **TEAM MONARCHISM** will delegate production tasks amongst themselves.

Basic Asset categories include: Music, SFX, VFX, Cut scenes, 3D character models, 3d item models, 2d inventory sprites, fonts, emojis, particles, etc...

Token Payment for these assets will be listed on a bounty set by **TEAM CAPITALIST** based on available financial resources held by the DAO.



TEAM MUTUALISM

A: ANIMATION & RIGGING

Every movement of a 3D object in a game must be designed by visual artists called **"RIGGERS"**.

RIGGERS determine how objects travel through space and give life to virtual worlds with motion and movement.

This is a technical role requiring experience in 3D animation and coordination with Game Engine developers on **TEAM PRIMITIVISM**, and 3D artists on **TEAM MONARCHISM**.

B: TEXTURE CREATION & MAPPING

All 3D objects have no color or texture until they are painted, mapped, and applied by a 3D artist.

This is also a technical and artistic role requiring cooperation with **TEAM PRIMITIVISM** & **TEAM MONARCHISM**.



TEAM AGORISM

A: GAME & ENGINE USER INTERFACE

TEAM AGORISM will manage all aspects of in game GUI design, and the game Engine's GUI design.

This is a high skill role that requires experience in game engines, software production, and GUI design.

TEAM AGORISM will coordinate with TEAM MONARCHISM to acquire art assets, and TEAM NATIONALISM, to ensure that UI design fits with the brand image and strategy.

B: VOXEL STRUCTURE BLUEPRINTS FOR WORLD GEN

This is a low skill role that will be available after blocks and textures have been shipped.

Users will be paid bounties to **build various voxel structures** for the WORLD GEN MODULE in the 9 different faction styles.

This creates a library of 3D voxel objects that can be procedurally applied when every world is created.



TEAM NATIONALISM

A: BRAND BOOK CREATION AND MARKET RESEARCH

A “**BRAND BOOK**” is a marketing document that dictates the design particulars, and advertising philosophy for a particular brand or product.

The “**BRAND BOOK**” is consulted every time a new piece of media is created to ensure that brand identity is consistent across all platforms and mediums.

TEAM NATIONALISM manages the brand identity of the game by maintaining the brandbook with fonts, color codes, logos, and a catalogue of previous design work.

The fundamental role of **TEAM NATIONALISM** is to create marketing materials that propagandize ANARCHAEA.

TEAM NATIONALISM also conducts market research and analysis in the games industry by maintaining an awareness of trends and news in gaming journalism and social media spaces.

Market Researchers identify and exploit the failures of other game companies and propose strategic objectives to assist in undercutting the competition with better services & pricing.

The Marketing team is a militarized division of posters and gaming industry market strategists who have a deep awareness of where the gaming industry is failing its users.

B: ADVERTISEMENTS, PARTNERSHIPS, & SOCIAL MEDIA

TEAM NATIONALISM works outside of the game in various social media and advertising spaces to acquire users and maintain interest in ANARCHAEA.

TEAM NATIONALISM can coordinate with artists in TEAM MONARCHISM to create compelling Advertisements and promotional materials for the game.

Various merchandising orgs, and game companies may want to showcase their products in ANARCHAEA.

TEAM NATIONALISM will manage negotiations with these organizations, and require them to conduct all monetary transactions with the DAO through our token.



TEAM CAPITALISM

A: CRYPTO CURRENCY TOKENOMICS AND DESIGN

ANARCHAEA's value proposition is extremely simple.

\$(TBD) (See final pages) will be used as an arcade token which must be spent to play on the main server.

A **24 hour pass** will cost ~\$0.99 or 1 Token

A **2 Week pass** will cost ~\$9.99 or 10 Tokens

An **Annual pass** will cost ~\$99.99 or 100 Tokens

The main server is where users will experience global social community, incentivizing users to buy **\$(TBD)**

The second utility will be that **\$(TBD)** will be the sole in-game crypto currency for purchasing assets from other players.

To buy an item from a player, or from a marketplace, you must own **\$(TBD)**. This creates token demand.

Token Supply will be 1 Billion tokens.

At **ANARCHAEA's** target Market Cap of \$1 Billion:

1 token = \$1.00.

Game play will cost 1 token until we hit 1 Billion Market Cap, then token price of admission will be lowered by the DAO.

B: BOUNTY PAYMENT CONTRACTS

All Art & Code for the game engine will be acquired by paying Bounties for specific game or engine features and art.

TEAM CAPITALIST will be charged with itemizing the costs of all different code features, verifying completed orders, then transferring tokens via smart contract to the intended recipient upon fulfillment of the Bounty.

TEAM CAPITALIST will need smart contract programmers to automate claiming and collecting art and code Bounties.

TEAM CAPITALIST will coordinate with all other teams, servicing urgent features with monetary incentives according to a budget.

TEAM CAPITALIST is the capital management team. They manage tokenomics & smart contracts. They also produce budget recommendations to be approved by officers on **TEAM PACIFIST**.

All financial negotiations are handled by this team.



TEAM TRANSHUMANISM

A: AI INTEGRATION AND BOT/NPC PROGRAMMING

All NPCs will be autonomous AI agents that develop their own personalities and behavior preferences in the game.

DWARF FORTRESS will be referenced as the ideal systematic computational methodology for efficient behavioral mechanisms.

Due to computational limits, *it may be necessary for this team to limit AI feature activation.* AI limits must be coordinated with the GAME ENGINE DEVELOPERS.

B: GAME ENGINE OPTIMIZATION AND DEV TOOLS

TEAM TRANSHUMANISM will be tasked with assisting in code evaluation, utilizing AI tools to improve computational efficiency during game run time, and also as devs for the game engine itself.

TEAM TRANSHUMANISM will also develop and maintain a Modding framework for the GAME ENGINE.



TEAM PACIFISM

A: DAO VOTING COMMITTEE & FINAL GAME DECISIONS

TEAM PACIFISM will be charged with voting on final game decisions, and will comprise large token holders from each of the factions. (token amount TBD)

Discussion and voting will take place for the purpose of setting objectives, task prioritization, token budget management, and allocating human or financial resources to factions when they are in need of extra assistance to complete their tasks.

THE GAME DEVELOPMENT ROADMAP is to be developed by this team.

THE ROADMAP is to be maintained and updated in this white paper with new versions added to title & header with each update.

The beginning aspects of the roadmap are present in this white paper but will require greater detail.

B: TEAMS ADMINISTRATION AND COORDINATION

TEAM PACIFISM's secondary role is to facilitate communication and understanding between technical and non technical personnel.

Conflict prevention, communication, and an objectives based mindset are necessary to fill this role.

TEAM PACIFISM will ultimately be composed of the natural leaders that emerge in the other 9 factions. Their expertise will be relied on to help facilitate a greater understanding of the whole project for all.



CONCLUSION

Remember that this White Paper is a living document.

New Versions will be released as new insights and objectives are clarified by the various teams. **This white paper will serve as the master document for all teams to reference** when seeking clarity on any part of the development process.

It is the authoritative document that will store stylistic and technical guides, and will generally guide the development process and team collaboration.

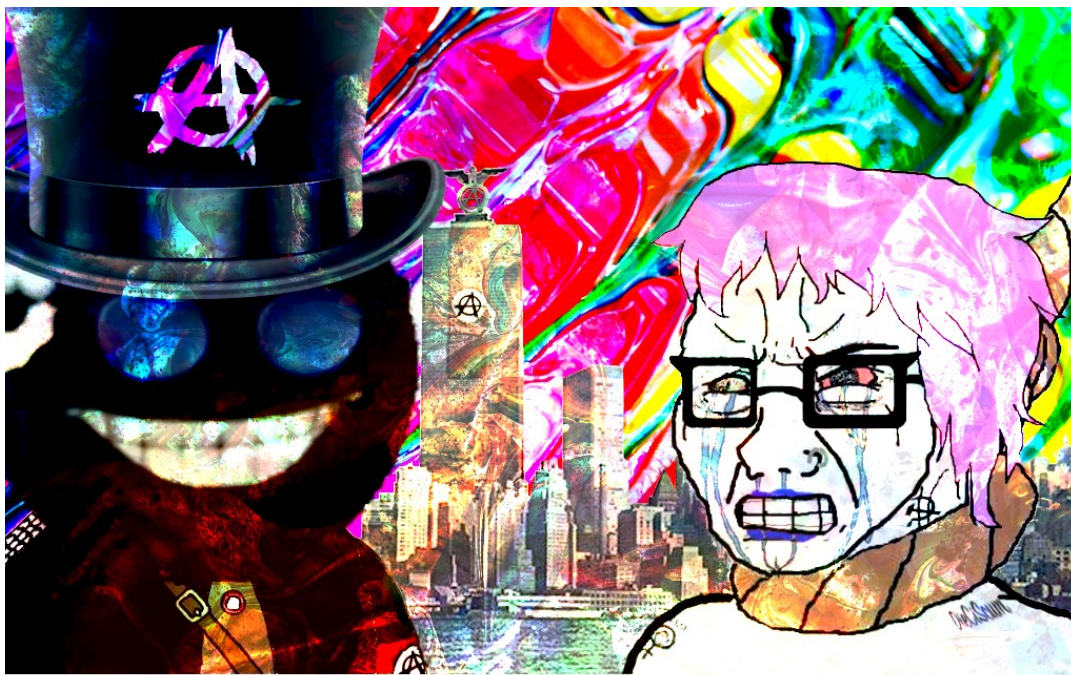
The White Paper will be maintained by token holders in the DAO, their agents, and paid technical experts.

This is a serious long term project that will require technical expertise in multiple domains.

The intention is for gamers, artists, and developers to compete with the AAA gaming industry at the highest level, and **to give the talent a fair cut of profit.**

We will accomplish this, by returning to what game development used to be about: making. good. games.

All we ever wanted was honesty in gaming journalism...



Why did you force me to do this ?
I just wanted to play video games

MEME MAKER GUIDE:

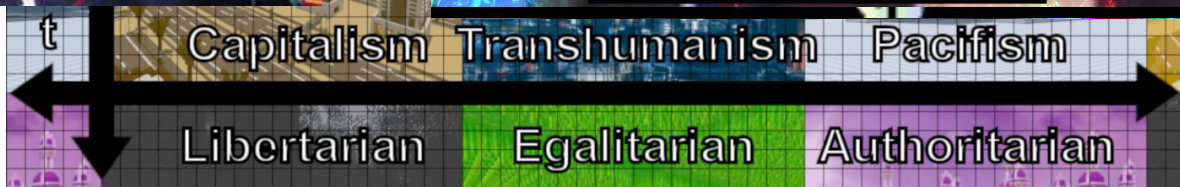
1. Get Ebin Meme...
2. Add Anarchy meme balls over faces...
3. Add holographic color layers & text...
4. Profit???



This is Uncle Anarchy...



HE WANTS YOU! 2 MAKE EBIN MENES



GAME DEVELOPMENT ROADMAP TO PLAYABLE DEMO V.1.0

1. Create Voxel Block IDs, Character IDs, & item IDs
2. Share White Paper and generate Ideas

3. Build Optimized Voxel Engine with Greedy Mesher
4. Run World Gen Tests with 9 colors of blocks
 - Create Concept Art for all items in game
 - Create basic 3D characters for engine tests
7. Create Voxel Textures for all blocks in game
8. Rig and animate character and item movements & FX
 - Create GUI functionality & control mapping
 - Build stock voxel structures for world generator
 - Create marketing and promotional art & videos
 - Line up Partnerships for future collaborations
13. Structure Bounty payments & smart contracts
14. Launch Meme Token with supply allocations
 - Program basic AI bots for NPC functionality
 - Assist in game engine dev & optimization
17. Verify Game functionality with Beta Release
18. Vote to Release V.1.0 & set new tasks for V.1.1

All of the above statements are general, and **require all interested parties to participate** to fulfill these objectives by choosing a team to work with, focusing on particulars, communicating with other teams, and organizing tasks. **The most critical and important objective** is to acquire the **GAME ENGINE** & **TOKEN**.

MISCELLANEOUS SPECS & NOTES

ANARCHAEA : THE VIRTUAL ARCADE

ANARCHAEA's most important feature as a METAVERSE, will be its **in-game 3D lobby modelled after video game arcades** that served a social purpose.

This server will have coordinates of $(0,0)$ and stand outside the x/y grid of other ANARCHAEA servers.

$(0,0)$ has no PVP combat or voxel manipulation and functions as a tutorial space for new players.

This server functions as a social space with movie theaters, swimming pools, and work stations where people can work virtually within the game.

There will also be portals that give access to other games built on the ANARCHAEA game engine.

Mini games like cards, dungeons and dragons, tag, etc... can be played on this server as well.

$(0,0)$ is the social media space within ANARCHAEA.

BASIC GAMEPLAY MECHANICS

The fundamental gameplay mechanic for ANARCHAEA is a “Rock, Paper, Scissors” type game logic.

The first 3 factions are **MAGICAL:**
ANARCHISM, **PRIMITIVISM**, & **MONARCHISM**

The middle 3 factions are **MECHANICAL:**
MUTUALISM, **AGORISM**, & **NATIONALISM**

The Final 3 factions are **TECHNOLOGICAL:**
CAPITALISM, **TRANSHUMANISM**, & **PACIFISM**

TECH <beats> **MECH** <beats> **MAGIC** <beats> **TECH**.

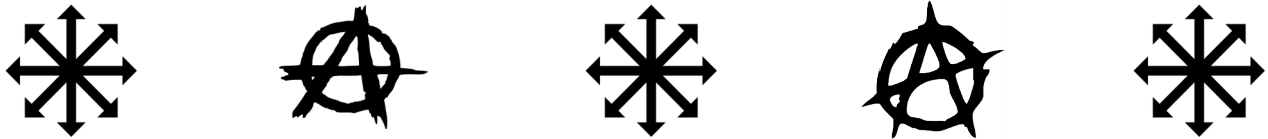
Factions progress historically and technologically from 1 to 9. The faction immediately above another faction <beats> the faction before it. The exception to this rule is that **ANARCHISM** <beats> **PACIFISM**.

Other faction interactions can be developed. The details of stat implementation are TBD as of V.0.0

Players however should cultivate EXP within particular factions by doing “faction aligned activities”.

FACTION VARIETY & CHAOS THEORY

The 9 factions are designed to create a minimum of 9 item variants per model / Texture. Simply by shifting the primary color on an asset, a new item can be created simply by assigning it faction aligned stats.



Over the course of development, it may be deemed possible to assign two factions to each item in the game. This would give each item a primary and secondary faction. In this instance, each item would have 72 variants, with 9 of those variants being “pure” or composed of a double of the same faction.

“Pure” items would be the rare items on a server that are maxed out on one particular stat, and in some cases may have higher market values than other items which are composed of two different factions.

This complexification can theoretically be continued to triple, quadruple, or quintuple faction assets creating hundreds, or thousands of unique item types per 3D model & texture. (depending on hardware limits)

This creates an efficient complexity via chaos theory.

GRAFFITI, FLAGS, & TERRITORY

Graffiti & Flags are means by which players & factions can claim ownership of Territory in ANARCHAEA.

Graffiti and Flags emit a radius of owned territory.

The larger they are, and the higher up they are on the z axis, the larger the radius of territory they claim.

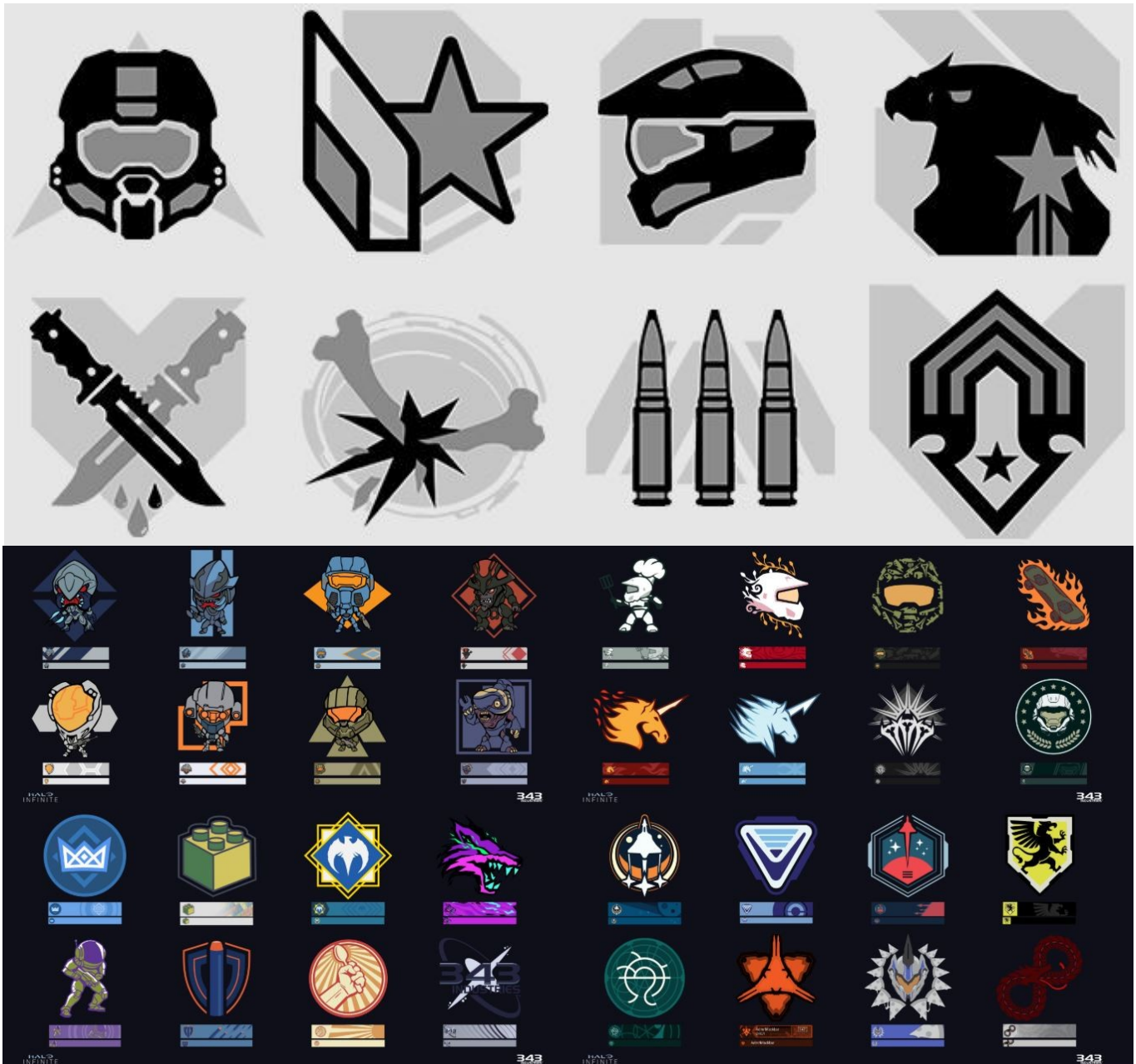
Claimed territory can be by **"line of sight" (Ray tracing)**.
Players then must establish multiple flags and graffiti works to claim large swaths of territory.



Both Graffiti and Flags are faction aligned to 1 of 9 factions.
There can be multiple unique teams of players in each faction,
and teams can be composed of players from multiple factions.

Players, and teams of players can choose a work of art to feature in their graffiti and flags.

Players get 2 works of art for themselves, and 2 works per team they are a member of. (.png file) (profile picture / banner)



When enough contiguous voxels are claimed by a player/team, The player/team is able to **name the territory as they like.**



A master database on the server will maintain the names of all currently active territories.

^TerritoryID	Passphrase	&Group	@Admin	Type	Coords (x,y,z)
^CrazyTown	*****	&CrzyBoyz	@CrzyGuy	Graffiti/Flag	(1234,1234,123)

An “offline” database will store the history of different territory names and their master groups.

Creative math & mechanics may be necessary to make the designations of territories computationally efficient.

Graffiti & Flags should have “expiration dates” so that flags/graffiti that go unused for extended periods of time, are erased from the server to make space. (If necessary)

Other mechanics TBD...

TEAM GAMEPLAY : SQUADS & GUILDS

Players have the ability to create “SQUADS” which are teams of up to 5 players.

The user who creates a Squad is the “ANARCH” or Admin.

The ANARCH of a SQUAD is the only player who can upload or change the SQUAD art that is displayed on flags & graffiti.

Players can leave a SQUAD at will, but must receive an invitation from the ANARCH to join.

SQUADS can join together to form “GUILDS”. Every Guild has a “CHARTER” or set of rules, and the ANARCH of a SQUAD must sign the charter for their SQUAD to join.

GUILDS also have unique art for flags and graffiti.

GUILDS are supergroups of SQUADS with dozens of users and can make claims to territory with flags/graffiti.

PARKOUR MECHANICS

After city world generation is complete, parkour mechanics and animations should be prioritized.

This gives unique mechanics for combat & travel.

Basic skills and commands are listed below.

1. Rope/Wire Walk (balance mechanic tony hawk game)
2. Wall run (Double jump near a wall to wall run)
3. Aerial Roll / Vault (clear air by crouch mid jump)
4. Slide (Press crouch while running to slide)
5. Belly Crawl (double crouch)
6. Climb wall (Tony hawk game mechanic to balance)
7. Rope Attachments (Spider Man Swing Mechanic)
8. Ground Roll (crouch when hit the ground to roll)



CHESTS & INVENTORY MECHANICS

Inventory limitation is a central aspect of ANARCHAEA.

Players can carry no more than 2 voxels of material in a “Treasure Chest”, and 1 voxel in their hands.

This limitation will force players to interact, exchange, and cooperate to acquire materials that are necessary for building structures and crafting items.

Animals can carry blocks and travel in rough terrain. Vehicles are terrain limited but carry more blocks.

When carrying a voxel by hand, players cannot run.

Treasure Chests have built in wheels for travelling.



LO-FI DESIGN PARADIGM

In the earliest days of computer game design and development, **developers had to be intentional with resource consumption, because computational resources were limited.** This created the “Low Fidelity” or “Lo-Fi” aesthetic. Which is now reproduced for it’s nostalgic retro gaming and media style.

Early Nintendo, Playstation, & Dreamcast consoles used **various technical hacks in order to create the experiential impression of realism and continuity.**

This was especially the case with earlier consoles, and smaller consoles such as the game boy.

Audio was generally lo-fi, textures & sprites would be reused in creative ways. **Everything was engineered to it’s smallest and most efficient possible format** to ensure that features could be added in development.

ANARCHAEA, as a massive open world metaverse potentially **hosting thousands of players on the same server**, will require a similar degree of meticulous engineering to ensure that the game remains functional when thousands of players are taking actions at the same time, on a single server.

NEOCHIBI CHARACTER DESIGN

CREDIT TO @SCHIZOPOSTERS



CHARACTER CUSTOMIZATION HACK

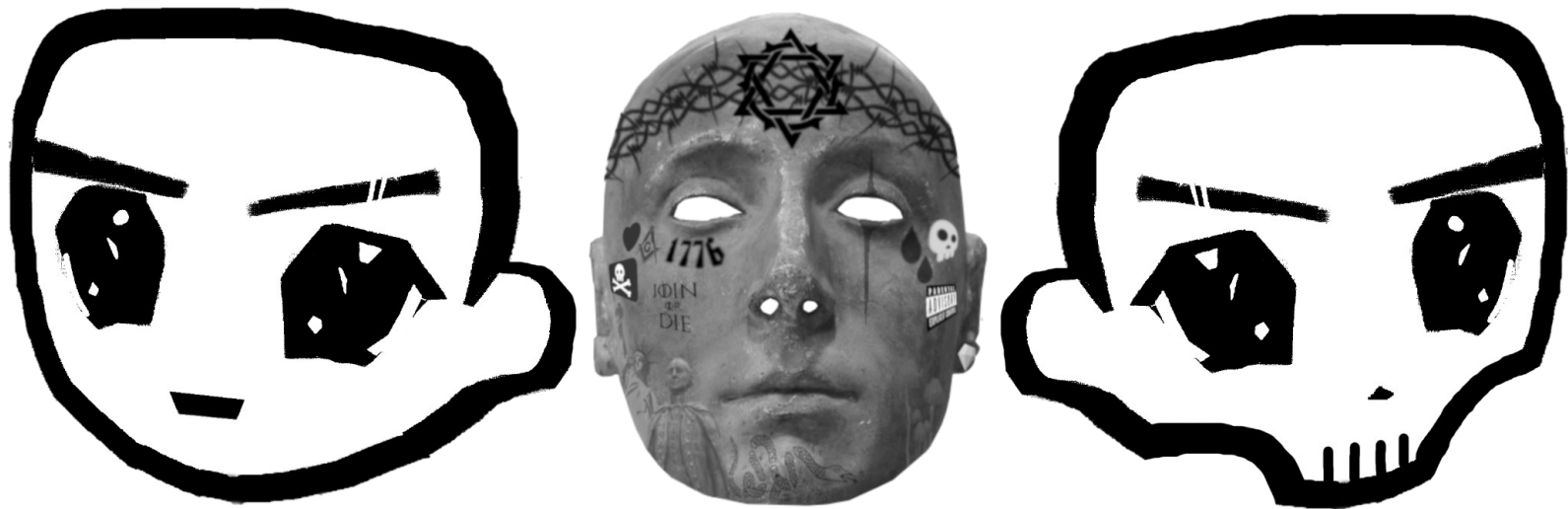
Rather than allowing players to customize characters, there will be one stock avatar and **players will customize their character with a custom mask.**

This mask can display .png images uploaded onto the server. (A size limit should be enforced)

This allows players to customize characters while not requiring an advanced character creation GUI and keeps **all customization 2D and computationally efficient.**

This allows for player characters to all use the same 3D model increasing computational efficiency.

Masks also play into deep lore of internet anonymity.



NEW AMERICANA CARTOONING STYLE

CREDIT: @BENCALDWELLART



POWER RANGERS COMBAT ANIMATION

In the famous television show “Power Rangers” sparks & smoke are used as a combat animation with tactile impact.

In ANARCHAEA, the color of the sparks will indicate the faction experience that a user loses in combat.

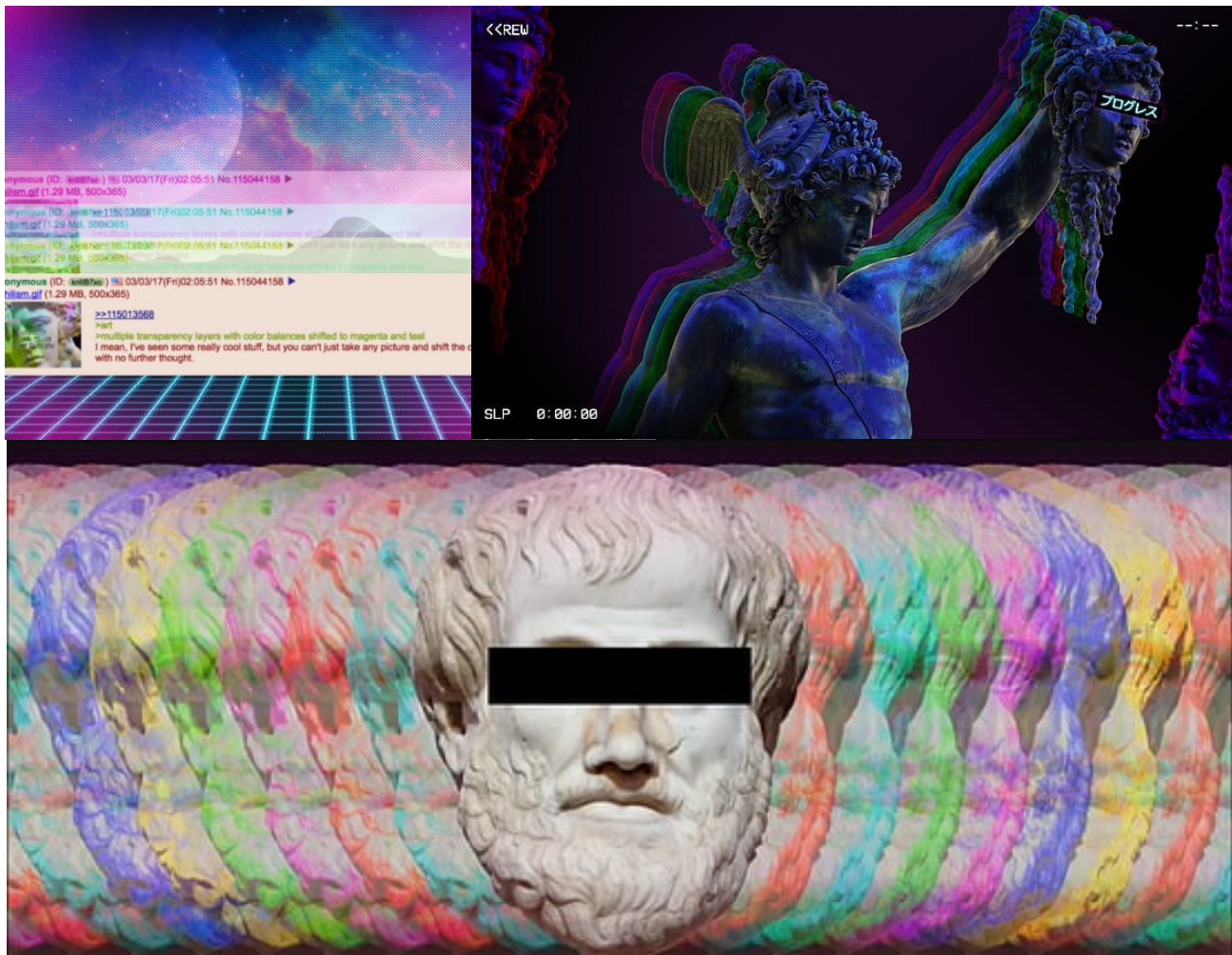


IRIDESCENCE & HOLOGRAPHIC VFX

Wherever possible, and in resource efficient ways, naturalistic multicolor effects should be utilized as a stylistic method for color “smoothing” in game.

9 distinct colors can create a jarring visual effect. Multicolor VFX can help to generate a subconscious impression of color flow and realism.

“In camera” post process VFXs like rgb split & Glitch.



“VAPORWAVE” AESTHETIC & DESIGN



GAME GUI DESIGN & TEXT DISPLAY

Players will be able to choose from two GUI formats:

CINEMATIC (HORIZONTAL BARS) & RETRO (VERTICAL BARS):

By default, 3rd person is **CINEMATIC**, and 1st person **RETRO**.



All text that appears in game should follow the “VaporWave” Aesthetic, with a black bar and text. (text can be colored...)

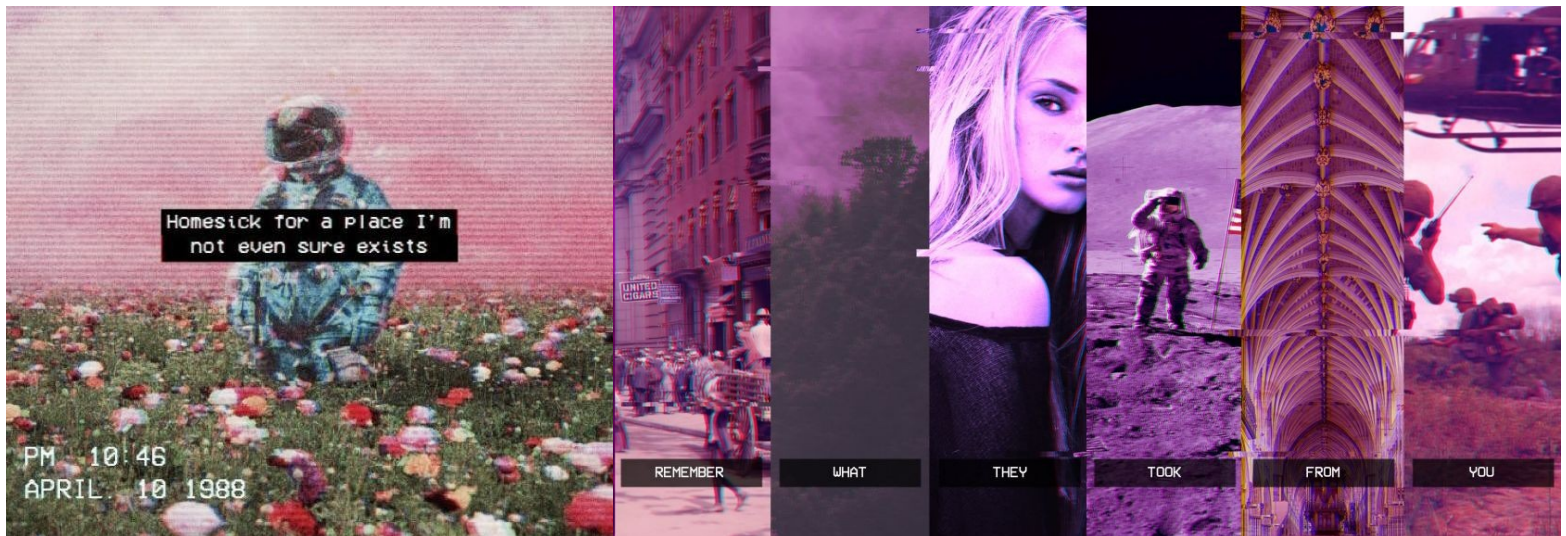
FONTS & TYPOGRAPHY

The Game Engine and 2D interface should have a font file parser that allows users to customize the font of the GUI.

There are two font formats: ASCII/UTF8 or “ANARCHII”.

When entering a region, a text will pop over the screen with “Lombardian capitals” for the 1st letter.

Users should also have access to fonts per character. This allows users to write/graffiti text in the game



world on 3D objects using specified fonts.

“Lombardian Initials” are capital letters that are used on loading screens when entering new territories,

the first letter for a player character, and general decorative text.

“Lombardian Initials” should be 9x the font size.

Monograms and Logos should also be accessible for each player to make custom.

ZINES, BOOKS, ADS, & POSTERS

CEL SHADING ART STYLE

A custom Cel Shader will be created for lighting. This shader will have 8 maximum “gradients” of light from 11% to 88%:

[11%,22%,33%,44%,55%,66%,77%,88%,]

Cel Shading is efficient, and produces a cartoon art style.



(Zelda: Wind Waker / Viewtiful Joe/Okami / Jet Set Radio / Armory 3D engine)

THE FOG OF ANARCHY

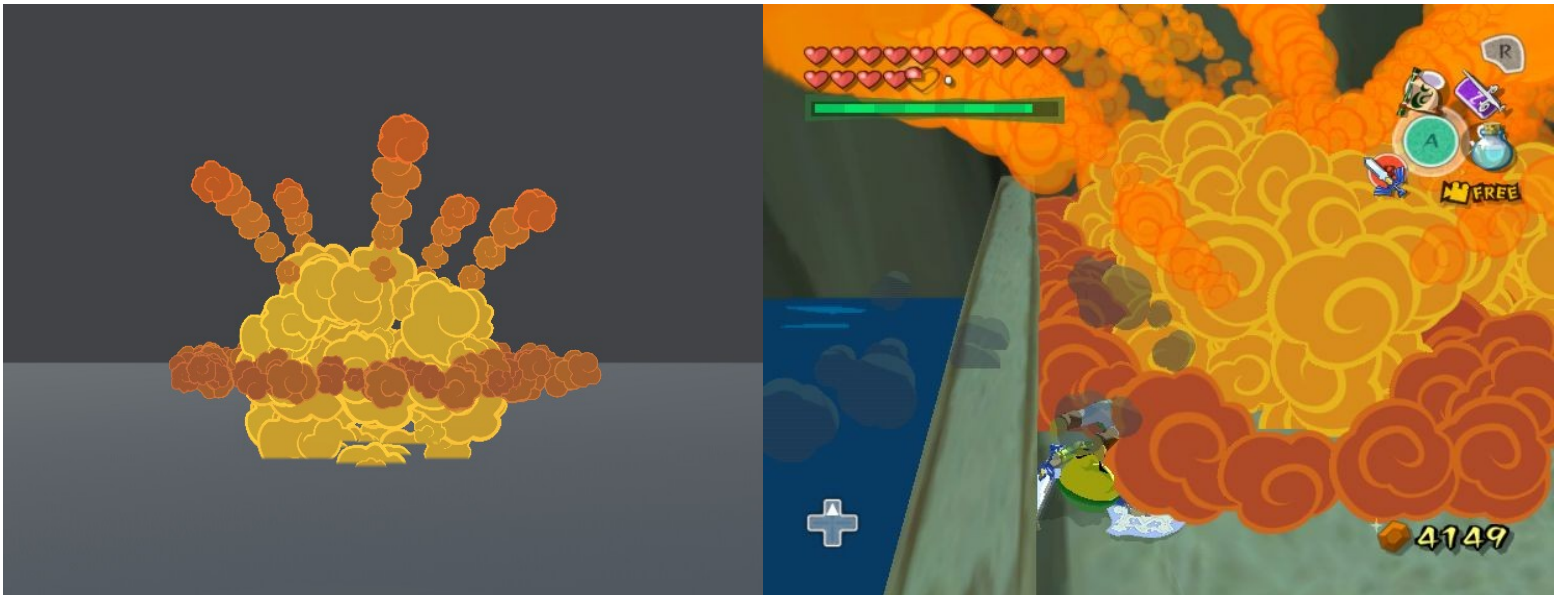
All surface level blocks will be rendered by the engine, but past a certain distance of player activity (~1 mile) the server will not render particular data for any voxels, and a fog

animation will cover the blocks only outlining their general shape and color.

Voxels underneath/behind **"The Fog of Anarchy"** will be rendered as dynamically generated monocolor sprites at 8 different angles in a circle around the player (on the client side)

This is intended to improve game engine performance in an aesthetic way that gives an immersive sense of the territory without any abrupt cut offs in rendering.

Fog should stylistically borrow from Zelda Wind Maker bombs.



(Particle FX with movement, rotation, & degrees of transparency.)

SHADERS & CUSTOM SHADER NOTES

Shaders should run "client side" locally on the user PC.

Users should be given access to a small library of different shaders of varying complexity to suit their taste, and the

computational limits of their devices.

Custom Shader creation should be allowed through a simple plugin interface that allows users to share custom shaders and add them to their own clients.

Reasonably, a marketplace could be developed for users to sell shaders and game mods in exchange for the in-game currency.

RAY TRACING PHILOSOPHY

In modern Game development, ray tracing is a resource



Xor
@XorDev

Subscribe

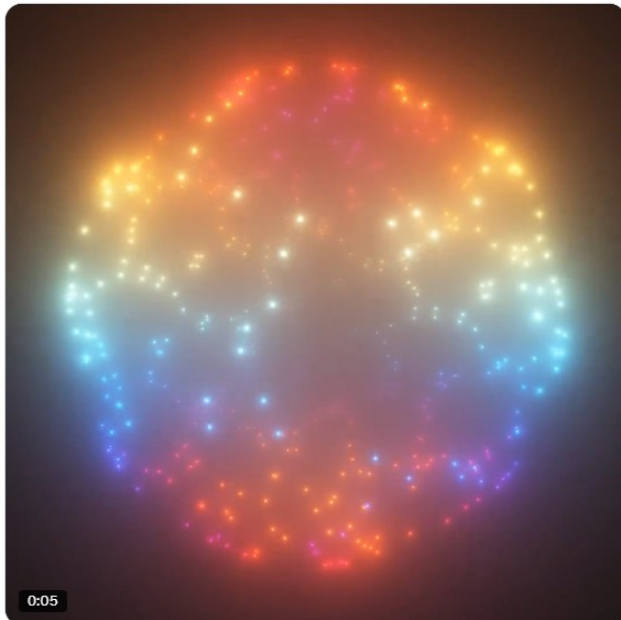


Yohei Nishitsuji
@YoheiNishitsuji · Dec 27, 2024

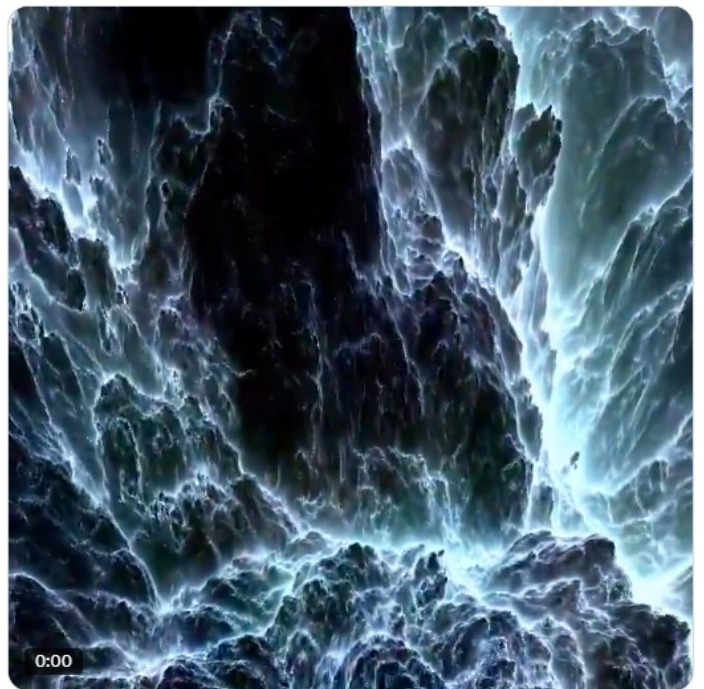


"Global" in 209 chars of #GLSL

```
vec2 p=(FC.xy*2.-r)/r.y;for(float i=-1.,N=4e2;i<1.;i+=2./N){vec3
v=vec3(cos(N*i*2.4+sin(i*N+t)+t+vec2(0,1)))*sqrt(1.-i*i),i);o+=
(sin(i*4.+vec4(6,1,2,3))+1.)*(v.y+1.)/N/length(p-v.xz/(1.6-
v.y));}o=tanh(.2*o);
```



```
#つぶやきGLSL float i,e,R,s;vec3 q,p,d=vec3(FC.xy/r-
vec2(.5,-.6),.4);for(q.yz--;;i++<119.){o.rgb+=hsv(.6-e,.3,min(e*s,.4-
e)/25.);s=2.;p=q+=d*e*R*.3;p=vec3(log(R=length(p))-t*.5,exp(-
p.z/R+.5),atan(p.x,p.y));for(e--p.y;s<2e3;s+=s)e+=-
abs(dot(cos(p.zxy*s),.2-sin(p*s)))/s*.4;}
```



intensive way to create hyper realistic lighting.

Ray Tracing will NEVER apply to lighting in ANARCHAEA.

There are two acceptable usages for Ray Tracing:

1. **“line of sight” Mechanics & FX** (Flags/Lens Flares)
2. **Ray Traced Audio SFX** (proximity/distance/direction)

When applying Ray Tracing to Audio, the audio file used should be **low quality 8bit/64bit SFX** (chiptune).

If ANARCHAEA uses Raytraced Audio, it will need all SFX to be in LoFi format with low bit rates.

Outside of these two purposes, ray tracing should be avoided and only used in particular circumstances.

If applicable, users should be able to turn off ray tracing to improve game performance and latency.

Low precision ray tracing is preferable if it adds considerable increase to engine performance, while maintaining functionality without buggy behavior.

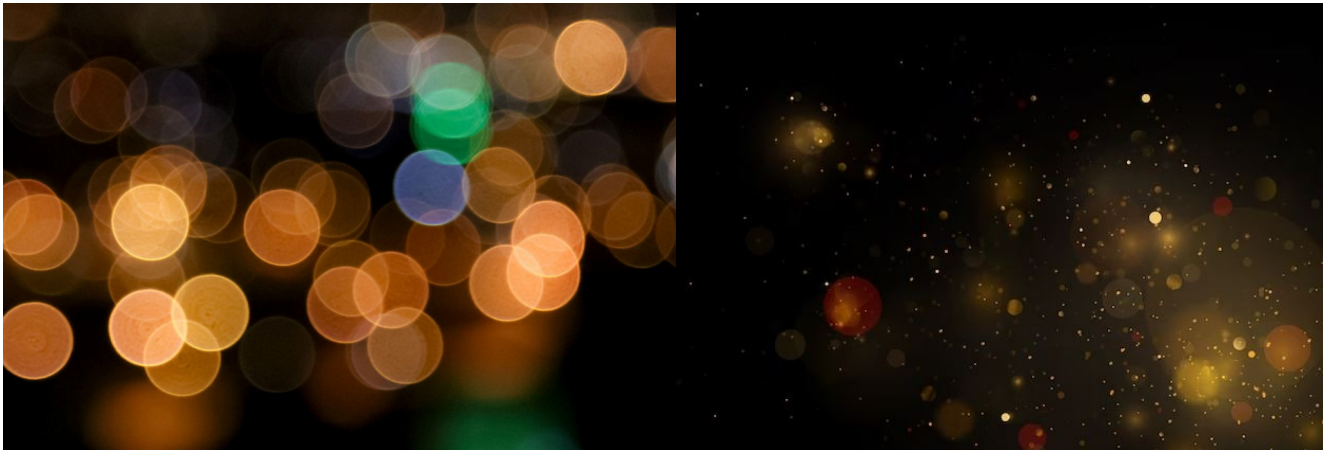
LIGHT: SHIMMER, BOKEH, & FLARES

All special lighting effects will be manually generated by creatively utilizing particle fx rather than using ray tracing.

@Vercidium has an excellent tutorial on how to create “light beams” without using resource expensive ray tracing.

[A Game Engine Built For Optimisation](#)

“Bokeh” is a resource efficient method for “distant light” VFX.
“Bokeh” requires one color & a transparent layer on a circle.



“Flares” are central part of internet history & crypto culture.
“Flares” are a resource efficient way to produce light VFX.



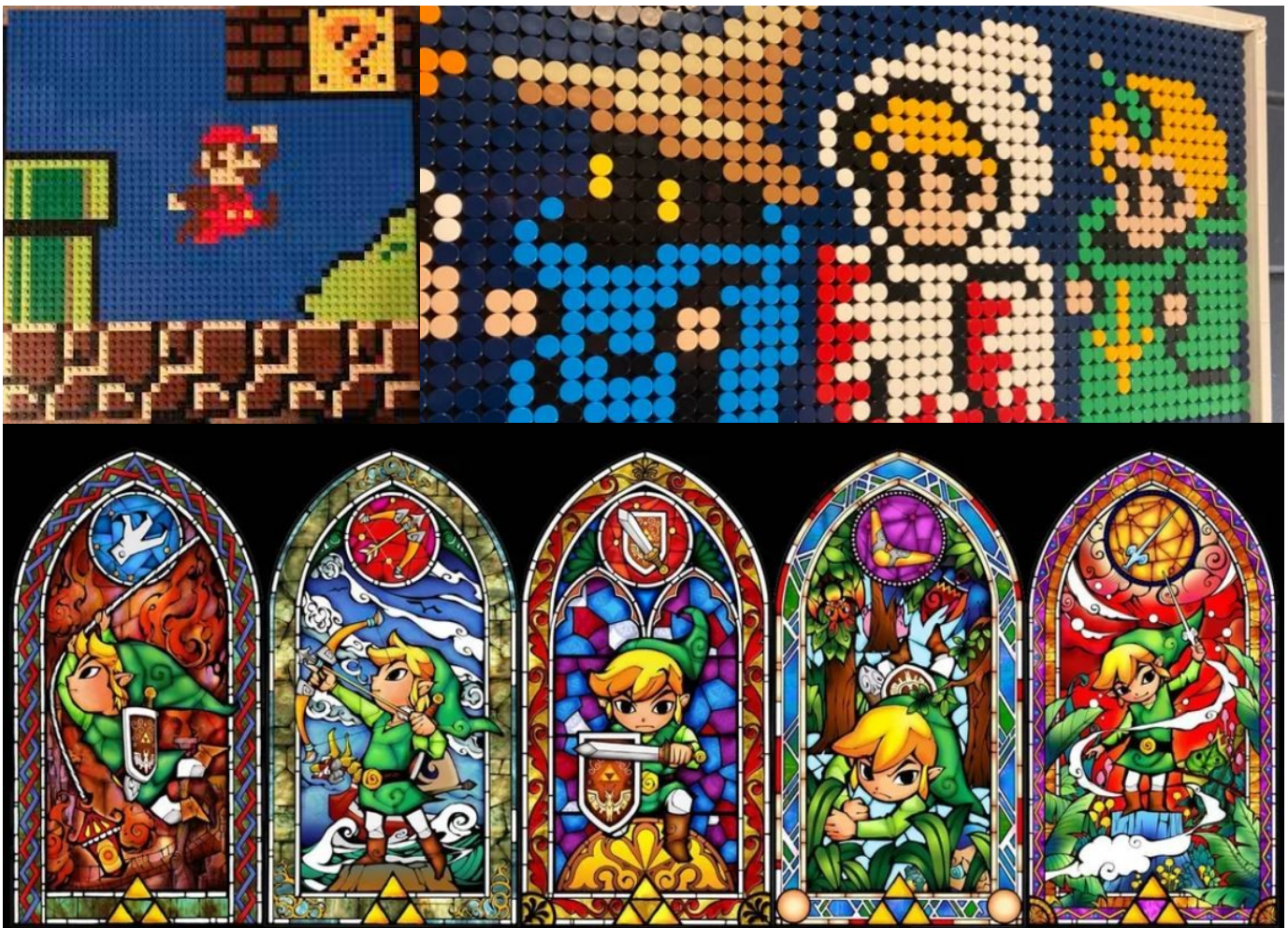
PIXEL MOSAIC ART

Pixel Art allows artists to create visual diversity using only a small computational footprint. In ANARCHAEA, pixels are 1/8th of a voxel (~1x1 inch).

Mosaics should comprise only 2 different block types:

1. solid objects (stone, wood, metal) (tile, marquetry)
2. translucent objects (crystals, glass, plastic) (stain glass)

The default engine should use only single pixel colors as a texture for mosaic pixel tiles. **Translucent tiles should have a transparency level for light to pass.**



STATUE & COLUMN ART

Players can upload low poly 3D models that can be made into “statues” of varying size from unique materials.

The statue 3D object file is like a “blueprint”.

The player must gather enough materials, and the tools to work them, in order to craft them into a sculpture.

Statues should claim territory like flags & graffiti.

3D objects should be low poly or CSG models.

Unused 3D statue models should be deleted from server.

Players should be allotted 1 3D object blueprint.



TEXTURE & TEXTILE DESIGN

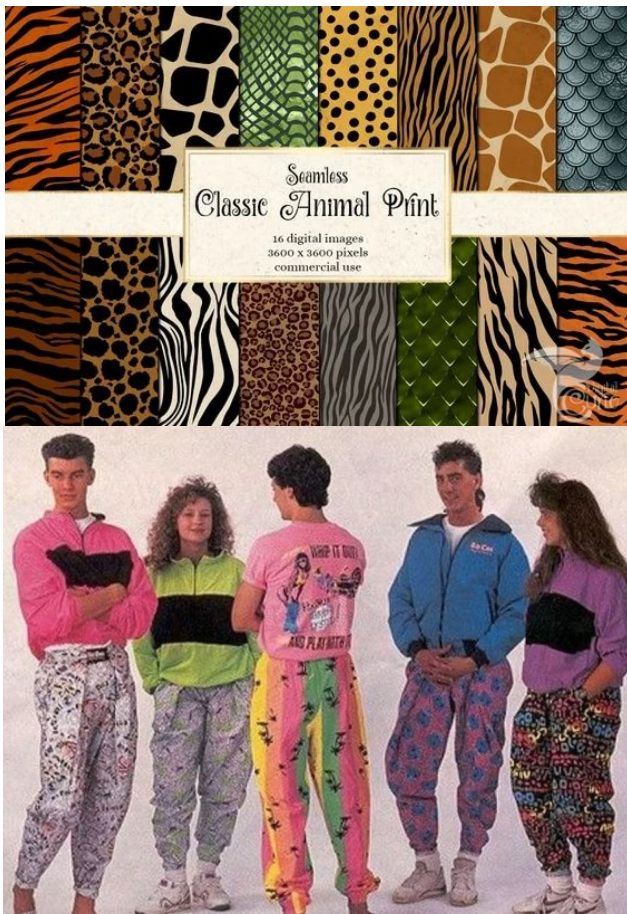
Textures should be designed to be efficient and lightweight.

Voxel textures will be 8x8 pixels where 1 pixel = 1.125 inches.

Tessellation, or repeating tile design technique should be utilized to give textures a continuous sense when tiled.

Textures applied to items can have a higher resolution than voxel blocks. (there are less items to render than blocks)

Players should be able to upload custom textures and apply them to cloth items crafted in looms or textile mills. This creates a diversity of visual aesthetics for players to choose from.



FRAMERATE & GAME TICK

ANARCHAEA's game tick is directly tied to framerate.

A “Game Tick” is the amount of “ticks per second” or TPS that indicates how frequently the server updates.

TPS should be either 1/2 or 1/1 or 2/1 of Framerate. Framerate (FPS) should be pegged at either 24 or 30.

24 would be the most efficient use of game resources.

With a properly optimized graphics rendering process in the game engine, 30fps is more than enough for clean images. Reference this video for more details:

[Unreal Engine 5 Is Killing Games](#)

FPS should be capped at 30 regardless, to democratize competitive games, decrease server load, and make ANARCHAEA a performant game on low quality devices.

TPS REFERENCES:

Old School Runescape: ~2 TPS (100 ticks per minute)

Minecraft: 20 TPS

League of Legends: 30 TPS

Halo: 30/60 TPS (depending on xbox live circumstance)

PUBG: 60 TPS

Overwatch: 64 TPS

Valorant: 128 TPS

GAMETYPES: ARCADE/BR/MOBA/MMORPG

AMARCHAEA is a hybrid game combining elements of Phone Games, Battle Royales (BR), Massive online Battle Arenas (MOBA), & Massive Multiplayer Online Role Playing Games (MMORPG) genres.

There will be three fundamental gameplay modes:

1. Lobby Arcade with turn based mini games and social media.
2. MMORPG massive open world sandbox game for collecting loot and leveling a character.
3. Battle Royale, where users can test their character in a competitive battle under controlled conditions with a 90 minute run time.

Game Modes 1 & 2 are self explanatory and have many examples.

Game Mode 3 utilizes a Battle Royale form like Fortnite & PUBG, but will be loaded into a freshly generated voxel world that is not connected to the open world of Game Mode 2.

Game Modes 2 & 3 will utilize a MOBA type 5 ability loadout with a passive and 4 active abilities. (Players will choose these abilities based on faction and weapon/item load out)

Balancing for MOBA type abilities will be managed by the DAO. At the time of this White Paper draft ability specs are TBD.

All games will be in 1st or 3rd person and will not use the typical fixed camera birds eye view method of most MOBA games.

CONTROL MAPPING

Control Mapping will be designed to ensure that console & PC users all have equal capabilities.

(PC players don't get extra key bindings console players don't have access to)

The directional controls are shifted so that the left right and forward motion are on the "A, S, D" keys. The backward motion is moved to the "Z" key.

This frees Q, W, E, and R for the MOBA abilities.

For convenience, MOBA abilities can be reprogrammed to mouse buttons or other keys on the keyboard.

Limitations of controls are artificially imposed on PC gamers to ensure all competitive games are cross platform without any advantage given to PC or Console.

Fortnite had an issue with this because PC users could perform tasks faster than console users because they had more programmable keys to automate tasks.

So PC users would always win in competitive games...

ANARCHAEA control mapping should facilitate balance.

PC	Console	Game Mechanic
----	---------	---------------

A	L-Left	Move Left
S	L-Up	Move Forward
D	L-Right	Move Right
Z	L-Down	Move Backward
Shift	L2xup(move)	Sprint [If close to wall, then run up, hurdle, and/or climb]
Mouse	R-Pad(move)	*Look Direction and menu navigation on pause screen
C	R-Pad-Press	Crouch/Crawl - Toggle (cycle down) (Climb?)
Space	L-Pad-Press	Jump
R-Click	R-Trigger	Interact / Atk / Fire Weapon / Use Tool / Select / Right Hand
L-Click	L-Trigger	offhand item / shield / select / Left hand / Throwables
Scroll Up	L Bumper	Toggle left hand item / tool
Scroll down	R Bumper	Toggle right hand item / tool
Q / MB1	A	Ability 1
W / MB2	B	Ability 2
E / MB3	X	Ability 3
R	Y	Ability 4 (Ultimate)
B	D-Right	Backpack / Inventory Menu
CAPS	D-Up	Auto Walk
X	D-Left	Ability / Knowledge / Specialization / Level / Exp Menu
F	D-Down	Emote Menu / Chat
Tab	Select	Map / Smart Contract Menu
Esc/~	Start	Game Settings Menu / Controls / SFX / VFX

SKILL, EXP, ABILITIES, & STATUS

The core game mechanic will be governed by 2 multi color status bars. One indicates EXP per level (LVL), and the other indicates LVL.

The EXP status bar indicates the collected experience of a player. The bar is multicolored, and represents the amount of exp received in each faction.

All factions have basic activities that grant exp.

Ex: Farming = Primitivism EXP, Blacksmithing = Monarchism EXP, Mining = Mutualism EXP, etc... In most cases, performing a faction ability/task grants the user EXP, whether the ability/task succeeds or not.

When the EXP status bar fills with EXP, the faction that is the majority grants +1 to the LVL status bar.

Every LVL is faction specific, with a max of 99 LVLs.

When a player levels up, they receive a single colored bar in their LVL status bar indicating the faction.

The GUI should group similar colors in the status bar, with the majority faction taking a dominant position. As a player levels up in a particular faction, they become more efficient at performing their faction tasks in game with slower load times etc...

Levels contribute to reduced Ability Cool down for faction related abilities, increased damage when utilizing faction related weapons, and in some cases, unlocks access to new abilities and tool capabilities. If possible, increased "aim accuracy" should be granted with ranged weapons per faction per level.

Max EXP is ~16 bits at 63,063 EXP, on average, it

would take 637 EXP per LVL to get to level 99.

A scaling curve system can make early levels easier.

In Battle Royale instances, EXP earning should be accelerated by at least 10x so that players can rapidly level up and get to max level (or close) within an hour of high intensity combat & game play.

Ability trees can be mapped onto this leveling system.

The goal is to keep the leveling system simple, and to encourage players to “specialize” in a faction or two, to enhance their skills and abilities in that faction.

NOTES ON WORLD MAP & VOXEL ID

(preliminary brainstorm for voxel & item ID naming conventions)

Similar to Minecraft, ANARCHAEA will divide world rendering into “Chunks” called “Qubes”.

“Qubes” are organized only into an (x,y) grid. The height of a “Qube” is the world height, or 999 voxels.(~500 yards)

The game engine decides which “Qubes” to render depending on player presence. All voxels are assigned to a “Qube”.

Qube ID Grid & Registry: [(+/-)x,(+/-)y] (4 bytes)

Voxel ID Grid & Registry: [x999],[y999],[z999] (12 bytes)

The Voxel ID interprets whether the x & y positions are (+/-) based on the parent Qube's designation for x & y respectively.

Z-axis has no (+/-) designation but starts from 0 at the bottom of the world & moves up to 999. (~2x minecraft height meters).

Each quadrant (++,--,+-,-+) has 10k x/y voxels & 999 z voxels.

Max world size of this system is ~40,000 x 40,000 x 999 voxels.

In human measurements, ~11 miles x ~11 miles x ~500 yards.

By making the Qube (x/y) coordinates alphanumeric, the world size can increase from 40k/40k/1k to ~140k/140k/1k voxels.

In human measurements, ~40 miles x ~40 miles x ~500 yards.

All Voxels & Items in Anarchaea should have unique ID alpha/numeric sequences that are less than 16 bytes/characters for efficient in game processing. These Unique item IDs are intended to be ported to a blockchain in Version 2.

VOXEL TRANSPORTATION

Every time a Voxel is moved/destroyed, it's coordinate ID goes to a "Transit" file & is deleted from the map.

The Transit file will designate what kind of action moved the block from what player (@handle)

Everytime a block goes into the server transit file, it's history is updated in a database of all server voxels. This

database will provide the data that is necessary for block chain ID when that feature releases in V.1.0 / V.2.0.

Limitations on inventory and block placement, ensures that this list of blocks in transit is manageable.

If a block is then placed again at another location, a transit history doc is created with the block origin position (x,y,z)

(x,y,z) origin	Transit?	User	Action	(x,y,z) Destination
(xxxx,yyyy,zzz)	Y/N	@User	Move/Destruct	(xxxx,yyyy,zzz)

*During World Gen, the origin of each voxel is listed as "Seed", the destination lists the block's 1st location.

VOXEL ID's:

ITEM ID's:

PROVENANCE AND BLOCK CHAIN IDS

Whether the first version of ANARCHAEA is built on a block chain or not, if a system can be devised to keep track of where game blocks come from, **it may be possible to port IDs onto a ledger at a later date.**

For technical reasons relating to Latency, **it may not be possible to build an MMO with real time combat mechanics on the block chain**, but specific features related to items can potentially be integrated into the block chain so that all items are "certified" via "receipts" through a ledger type system.

It is possible to generate a world using the same seed, and ensure that the item's origin is authentic.

Manipulating an item's origin becomes very difficult to do in the first place, and becomes even more difficult as these objects are moved around by players and certified on the block chain with each movement.

When a player wishes to buy an item, **they can check the ID and track every player interaction & location** ensuring that the item is real and "lawfully" in possession of the user they are purchasing from.

CUSTOM ASCII TEXT/ICON PROTOCOL

(Rename Proposition : ANARCHII ?

ASCII is the standardized text & control protocol with 256 available characters for computers that was released in 1963.



000 0x00		032 0x20		064 0x40		096 0x60		128 0x80		160 0xa0		192 0xc0		224 0xe0	
001 0x01	^A	033 0x21	!	065 0x41	A	097 0x61	a	129 0x81	?	161 0xa1	¡	193 0xc1	Á	225 0xe1	á
002 0x02	^B	034 0x22	"	066 0x42	B	098 0x62	b	130 0x82	@	162 0xa2	¢	194 0xc2	À	226 0xe2	â
003 0x03	^C	035 0x23	#	067 0x43	C	099 0x63	c	131 0x83	£	163 0xa3	£	195 0xc3	Ã	227 0xe3	ã
004 0x04	^D	036 0x24	\$	068 0x44	D	100 0x64	d	132 0x84	¥	164 0xa4	¥	196 0xc4	ä	228 0xe4	ä
005 0x05	^E	037 0x25	%	069 0x45	E	101 0x65	e	133 0x85	¦	165 0xa5	¦	197 0xc5	å	229 0xe5	å
006 0x06	^F	038 0x26	&	070 0x46	F	102 0x66	f	134 0x86	§	166 0xa6	§	198 0xc6	æ	230 0xe6	æ
007 0x07	^G	039 0x27	'	071 0x47	G	103 0x67	g	135 0x87	¨	167 0xa7	¨	199 0xc7	ç	231 0xe7	ç
008 0x08	^H	040 0x28	(	072 0x48	H	104 0x68	h	136 0x88	©	168 0xa8	©	200 0xc8	¸	232 0xe8	¸
009 0x09	^I	041 0x29	)	073 0x49	I	105 0x69	i	137 0x89	ª	169 0xa9	ª	201 0xc9	É	233 0xe9	é
010 0x0a	^J	042 0x2a	*	074 0x4a	J	106 0x6a	j	138 0x8a	«	170 0xaa	«	202 0xca	Ê	234 0xea	ê
011 0x0b	^K	043 0x2b	+	075 0x4b	K	107 0x6b	k	139 0x8b	»	171 0xab	»	203 0xcb	Ë	235 0xeb	ë
012 0x0c	^L	044 0x2c	,	076 0x4c	L	108 0x6c	l	140 0x8c	¼	172 0xac	¼	204 0xcc	Ì	236 0xec	ì
013 0x0d	^M	045 0x2d	-	077 0x4d	M	109 0x6d	m	141 0x8d	½	173 0xad	½	205 0xcd	Í	237 0xed	í
014 0x0e	^N	046 0x2e	.	078 0x4e	N	110 0x6e	n	142 0x8e	¾	174 0xae	¾	206 0xce	Î	238 0xee	î
015 0x0f	^O	047 0x2f	/	079 0x4f	O	111 0x6f	o	143 0x8f	¿	175 0xaf	¿	207 0xcf	Ï	239 0xef	ï
016 0x10	^P	048 0x30	0	080 0x50	P	112 0x70	p	144 0x90	À	176 0xb0	À	208 0xd0	Ð	240 0xf0	ð
017 0x11	^Q	049 0x31	1	081 0x51	Q	113 0x71	q	145 0x91	Á	177 0xb1	Á	209 0xd1	Ñ	241 0xf1	ñ
018 0x12	^R	050 0x32	2	082 0x52	R	114 0x72	r	146 0x92	Â	178 0xb2	Â	210 0xd2	Ò	242 0xf2	ò
019 0x13	^S	051 0x33	3	083 0x53	S	115 0x73	s	147 0x93	Ã	179 0xb3	Ã	211 0xd3	Ó	243 0xf3	ó
020 0x14	^T	052 0x34	4	084 0x54	T	116 0x74	t	148 0x94	Ä	180 0xb4	Ä	212 0xd4	Ô	244 0xf4	ô
021 0x15	^U	053 0x35	5	085 0x55	U	117 0x75	u	149 0x95	Å	181 0xb5	Å	213 0xd5	Õ	245 0xf5	õ
022 0x16	^V	054 0x36	6	086 0x56	V	118 0x76	v	150 0x96	Æ	182 0xb6	Æ	214 0xd6	Ö	246 0xf6	ö
023 0x17	^W	055 0x37	7	087 0x57	W	119 0x77	w	151 0x97	Ç	183 0xb7	Ç	215 0xd7	×	247 0xf7	÷
024 0x18	^X	056 0x38	8	088 0x58	X	120 0x78	x	152 0x98	È	184 0xb8	È	216 0xd8	Ø	248 0xf8	ø
025 0x19	^Y	057 0x39	9	089 0x59	Y	121 0x79	y	153 0x99	É	185 0xb9	É	217 0xd9	Ù	249 0xf9	ù
026 0x1a	^Z	058 0x3a	:	090 0x5a	Z	122 0x7a	z	154 0x9a	Ê	186 0xba	Ê	218 0xda	Ú	250 0xfa	ú
027 0x1b	^[	059 0x3b	;	091 0x5b	[	123 0x7b	<	155 0x9b	Ë	187 0xbb	Ë	219 0xdb	Û	251 0xfb	û
028 0x1c	^\	060 0x3c	<	092 0x5c	\	124 0x7c	:	156 0x9c	¼	188 0xbc	¼	220 0xdc	Ü	252 0xfc	ü
029 0x1d	^]	061 0x3d	=	093 0x5d	]	125 0x7d	>	157 0x9d	½	189 0xbd	½	221 0xdd	Ý	253 0xfd	ý
030 0x1e	^^	062 0x3e	>	094 0x5e	^	126 0x7e	~	158 0x9e	¾	190 0xbe	¾	222 0xde	Þ	254 0xfe	þ
031 0x1f	^_	063 0x3f	?	095 0x5f	_	127 0x7f	Δ	159 0x9f	¿	191 0xbf	¿	223 0xdf	ß	255 0xff	ÿ

ASCII has seldom undergone updates, 128+ of chars are unused.

A modernized ASCII should streamline basic features:

1. Game Controls: (program control slots)

(Game controls are assigned to the first 32 characters).

R1, R2, L1, L2, X(),Y(Δ) , A(X), B(O), Start, Select

C-up, C-down, C-right, C-left C-Click (Right Stick)

D-up, D-down, D-right, D-left (Dpad)

E-up, E-down, E-right, E-left E-Click (Left Stick)

(24 Char slots for game controls with icon glyphs)

(Retain 8 critical computer command slots and replace all unused or deprecated slots in the first 32 slots)

2. Numbers, special characters, and text:

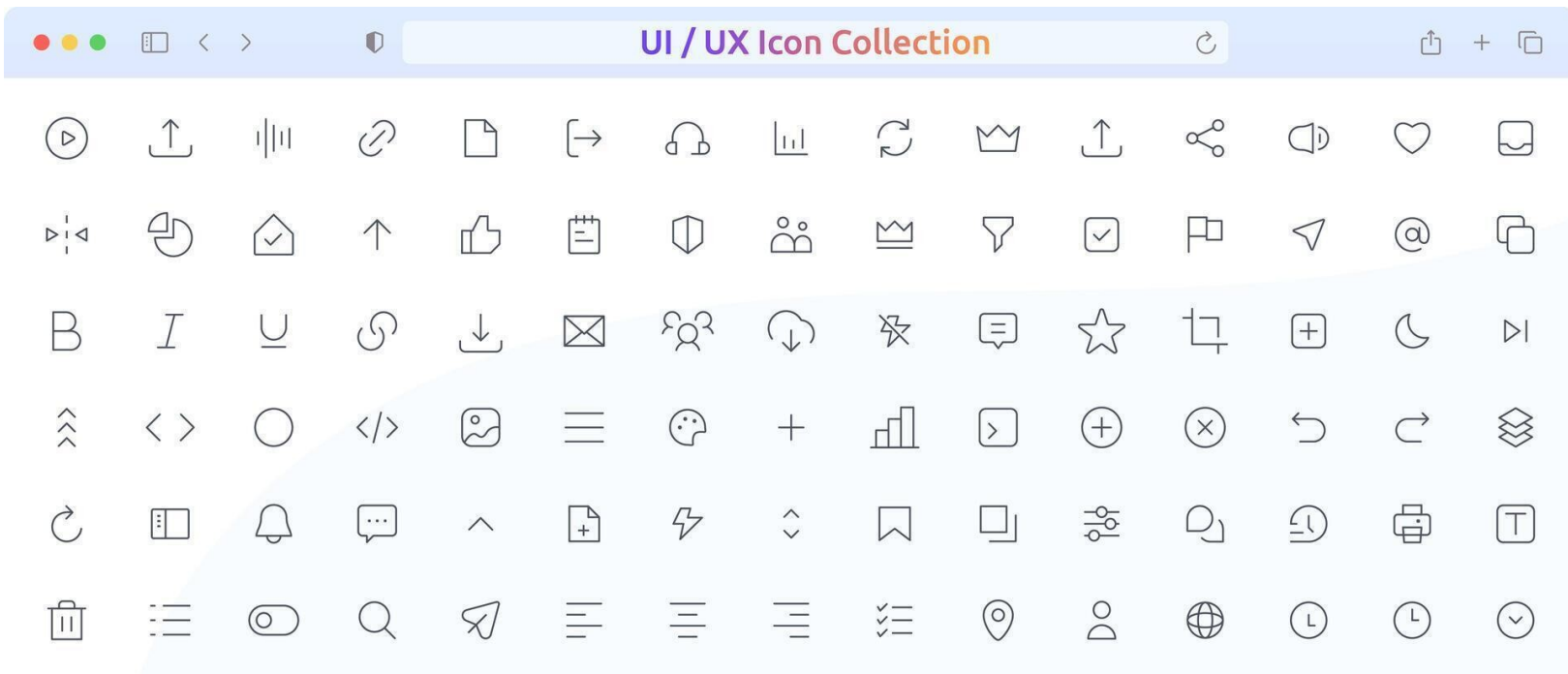
- Removing Lowercase clears 25 characters of space.

- Numbers & Letters account for **(35 Total Glyphs)**
- #027-#047 & #058-#064 & #092-#096 & #123-#127 are non alpha/numeric glyphs **(38 Total glyphs)**
- Removing 9 glyphs (deprecation) will bring these characters to **64 total character slots.**
- different parentheses types can be generated as ligatures by combining 2 character types:

<*= { **[] [] []** <:= (**[] [] []** <+=[**[] [] []** +>=] **[] [] []** :>=) **[] [] []** *>= }

3. Software GUI glyphs and buttons:

96 slots should be allocated for button icons that cover basic software needs of most GUIs. (▽examples▽)



4. ANARCHAEA assets & Emojis:

- **Approximately 64 slots remain for custom emojis.**
- In ANARCHAEA, we need 9 color/faction slots.

- Emojis should prioritize simplicity and cover a common range of expressions.
- Emojis should cover internet slang terminology such as: LOL, AFK, OMG, BRB, IDK, IRL, FTW
- ANARCHAEA DAO will have a special committee for ANARCHII. Any changes occur biannually. This allows font artists to update their fonts.

Select Popular & Utility Emojis listed below:

FACTION COLORS: [grey] (rainbow)

HANDS: []

REACT : []

TOOLS: []

TECH: []

TRANSIT: []

ELEMENTALS: []

LIFE: []

FOOD: []

UI: []

FACES: []

(o7)

MISC: []

Total Emojis: ~248

(reduce/separate 256 slot protocol)(208 + 40 Misc)

STYLISTIC & TECHNICAL NOTES:

Monospace Fonts preferred for design consistency.

Streamlining button icons and emojis into a 256 icon font, allows for software developers to have or change a “design aesthetic” simply by changing fonts.

It may be necessary to deploy 2 separate 8 bit fonts:

1 for text & GUI, another for Emojis: 512 total chars.

Icons & Emojis should be “interchangeable”. Icons & Emojis with GUI & Expressive utility are prioritized.

Always prefer GUI version of symbols:

Example: ➡ vs ☒ = ➡ is chosen, higher abstraction.

Arrow Symbol, can use 4 different “types” for each direction. Devs can rotate any type to produce different GUI graphics.

⬇Down ☒FastForward/Rewind/Up ☒Left ▶Play/Right

Monochrome design using Single colors for all icons and emojis is important for universal GUI display.

Monochrome also allows for “inverse Fonts” reversing the spaces that are filled with color. “Inverse Fonts” must be created & applied as separate font files.

Monochrome also allows for blanket coloration, which may have utility in ANARCHAEA game mechanics.

The purpose of remaking ASCII is to streamline text/UI/Emojis into a single format and increase efficiency.

SPECIAL KEYS AND CHARACTERS:

1. “!” Underlined text tag (!on both ends of phrase!)
2. “@” Username tag (@user)
3. “#” ID tag (Example: #LOL = 🤪)
4. “\$” Currency tag (new monetary logo...)
5. “%” Italic text tag (%on both ends of phrase%)
6. “^” Territory Name designator (^Territory)
7. “&” Group username tag (@group)
8. “*” Bold text tag (*on both ends of phrase*)
9. “/” DM with /@user, /&group, or /^Territory
10. “~” Bug Report tag (~game just clipped~)
11. “>” “Vocalize” tag (text appears overhead)
12. “>>” hyperlink function (x.com>>Twitter)

Keyboard UI & EMOJI mapping TBD...

ANARCHII LETTER DEPRECATION NOTES

By removing 4 letters from the english alphabet, it becomes possible to codify all letters, numbers, and a “space” character into 5 bits, adding another 32 special characters would make the system 6 bit.

This makes ANARCHII functional on a 6bit architecture.

The 3 letters proposed for deprecation in the English Language are as follows:

C: to be replaced with Q, S, X depending on context.
K: to be replaced with Q or removed in “silent” cases.
W: to be replaced with two instances of “V” (VV).
G/J: Either or, one character to be preserved.

For this reason, no code in the Anarchaea game engine, should include the deprecated characters (C,K,W,G/J) and should be insensitive to Case (capital letters).

A modified dictionary should be generated with AI assistance that dictates new spelling.

“LOGS” 2D APP INTERFACE

“Logs” are a text and image based “read only” interface for interacting with game events that do not require logging into the game and paying the token entry fee. (Social Media App)

All characters created in Anarchaea will have a “social media profile”. This profile is where a player’s activities will be catalogued with privacy options enabled for certain features.

Players cultivate a friend list and are given a feed of updates for friends across all public Anarchaea servers.

Players are able to use 2D Logs interface to chat with other players who are in-game, and vice versa.

Public chat & game acts (no coordinates) are listed in Logs.

Block coordinates will be obfuscated by default, with the option to share coordinates with friends and groups.

If a Player’s flag, graffiti, statue, or other “territorial marker” is destroyed, a notification will be sent to the user that can be checked in the 2D interface. This allows players to retaliate against aggressors who attack their territories.

To prevent “Stream Sniping” or “Log Sniping” a delay of ~120 seconds should exist between game events, and log updates.

Players will be able to use Logs to track other players, spy on group activities, and create another layer of in-game intrigue.

GAME WIKI & MOD DOCUMENTATION

The Game Wiki should and code documentation should be of a professional quality. **Bounties should be paid out to maintain the code documentation in particular.**

The Wiki is to be maintained by volunteers.

An in-game “Wikidex” (Pokedex pun) should be available so users can analyze block & item wiki articles and learn about the item sets and game rules.

This helps users access tutorial information in-game.

Code documentation should be directed towards modders who want to use the engine to produce their own games.

The modding engine should be “plugin” based, allowing users to build libraries of different plugins that can be reused & assembled to make building games easier.

Example 1: CutScene/Dialogue tree plugin can zoom out as 2 characters speak to another with a dialogue tree.

Example 2: Plugin adds new mobs, blocks, or items.

High Quality Plugins can be ported into the core game engine.

LOGS & WIKI INTEGRATION

Hyper-Linking between LOGS & WIKI should be integrated with “deceased” players being entered into the WIKI and removed from the live feed environment of LOGS.

Chat commands from the in-game chat interface should be consistent across LOGS & WIKI to synchronize user experience.

MERCHANDISING & COPYRIGHT

Merchandising will be utilized as a promotional tool and financing tool for the ANARCHAEA project.

ANARCHAEA “Intellectual Property” will NEVER be copyrighted.

“Official” merch will be marked with a block chain ID that will link to an NFT photograph of the shirt.

This will make all merch a virtual collectors item as well as a physical collectors item.

This incentivizes users to buy “official” merchandise.

Merchandising should be sourced via drop shipping with orders shipped to a warehouse, processed into NFTs for verification, and then reshipped to the customer.

Merchandising Propositions:

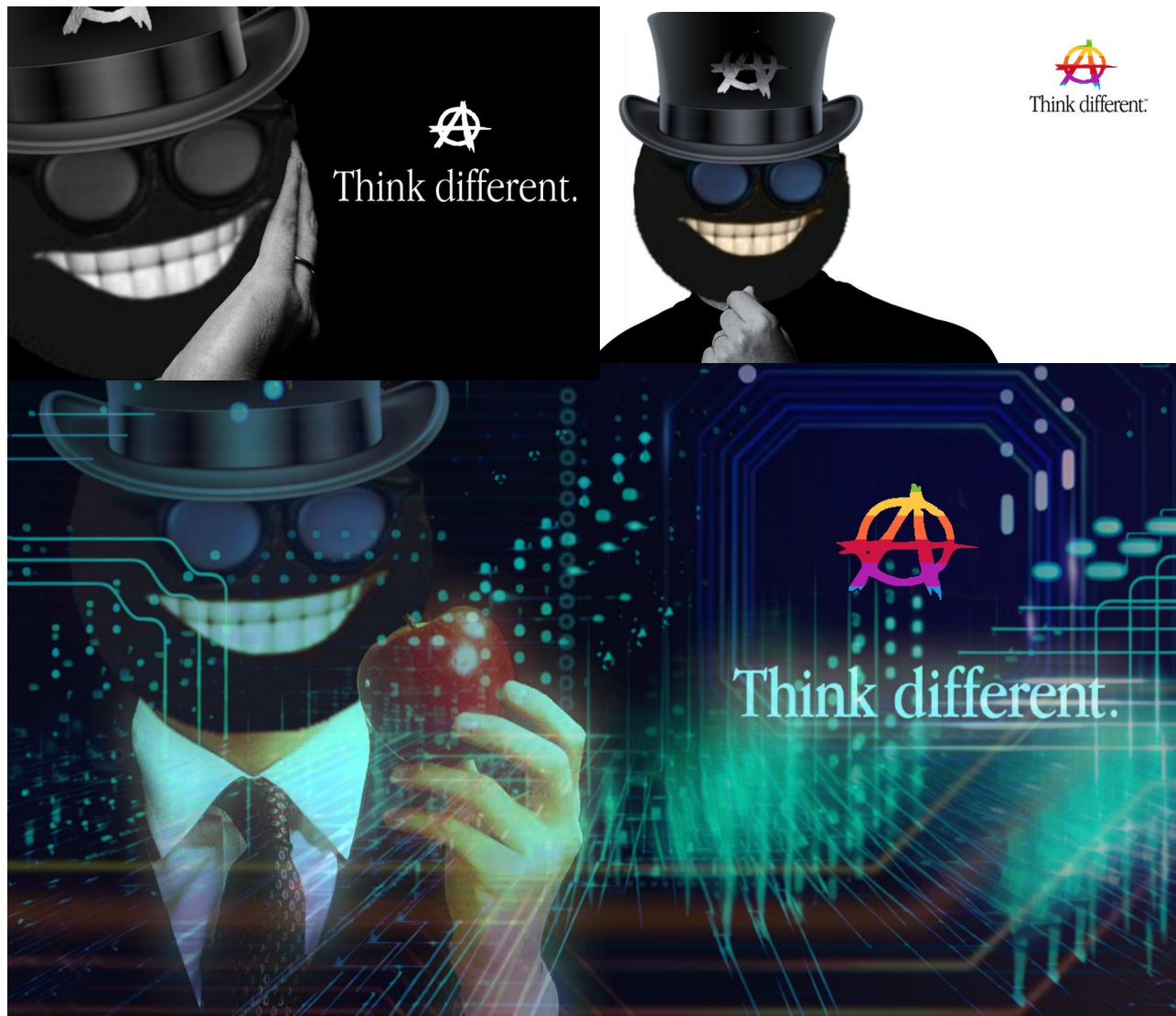
1. Playing Cards, Tarot Cards, Dice, Poker Chips
2. T Shirts, Socks, Bandanas, Hoodies, undergarment
3. Key Chains, Rings, Jewelry, hats, stickers, shades
4. USB, headphones, Keyboard keys, Controller skins
5. Cologne, Water Bottle, brand drink, supplements
6. Containers, Backpacks, Treasure Chests, etc...
7. Virtual Market Place: Mods, Shaders, Audio/Visual

DESIGN PHILOSOPHY : USER FIRST

Feature design should be designed with the user experience prioritized as the item of first importance.

Steve Jobs prioritized the experience of his users before the experience of the engineers working on various projects.

Industry standards and conventions don't matter if they create a bad user experience.



EXTRA RESOURCES:

RIOT games video series on game development.

[So You Wanna Make Games?? | Episode 1: Intro to Game Art](#)

VIDEOS RELATED TO MUSIC AND SOUND DESIGN

Video Essay on the first developers of digital music.

[Trackers: The Sound of 16-Bit](#)

Video Series on the use of modes in 8 Bit game music.

[LOCRIAN doesn't have to be S p O o K y](#)

GRAPHICS & VISUAL ELEMENTS

Photogrammetry : turning photos into 3D assets

[How To Get Hired As An Artist, with Alex Alvarez](#)

Notes on 3D environments

[Creating Natural 3D Environments with Alex Alvarez](#)

Industrial Light & Magic (ILM) Hollywood VFX

[Industrial Light & Magic creating the impossible FULL HD Cómo se creo star wars y otras películas!](#)

GAME ENGINE & TECHNICAL SPECS

Asmongold comments on ThreatInteractive exposing bad practices:

[Unreal Engine 5 Is Killing Games](#)

Schizocore Game Dev (Can we get this guy on ANARCHAEA???)

[Making my game 10x faster \(By starting over\)](#)

Greedy Mesher Methodology (different types of Greedy Meshing)

[So how are voxel games rendered, anyways?](#)

Catalogue of High Quality Minecraft Mods

[The Best Minecraft Mods That Completely Enhance Combat](#)

UTF8 hack explained (relevant to ASCII / ANARCHII):

[Characters, Symbols and the Unicode Miracle - Computerphile](#)

MARKET RESEARCH

Penguinz0 learns about game dev financials from bananadev

[Game Developer Reveals How Much A Popular Steam Game Makes](#)

Steam market data research:

[I Scraped the Entire Steam Catalog, Here's the Data](#)

Traba : How to perform corporate arbitrage and kill competitors
[He Quit Uber to Build a Trillion Dollar Company](#)

Why modern games are less creative and interesting today:
[The "Enginefication" of Games](#)

MISC HISTORY VIDEOS

Classic Minecraft / Mojang Documentary

[Minecraft: The Story of Mojang \(2012\)](#)

How Terrain Generation works in real life physics.

[Neal Adams - Science: 01 - Conspiracy: Earth is Growing!](#)

History of Tetris, one of the first hit games.

[The Story of Tetris](#)

History of Nintendo

[The History of Nintendo : A Documentary](#)

How Dwarf Fortress was made:

[How Two People Created Gaming's Most Complex Simulation System](#)

How not to run an indie game studio

[The Fall of 76](#)

Stardew Valley origin story:

[Why Stardew Valley's Creator Hated His Game](#)

THE OLDEST ANARCHY SERVER IN MINECRAFT : 2B2T FITMC playlist:

[I Survived 10 YEARS on Minecraft's 2b2t](#)

Jet Set Radio Documentary

[Masterpieces: Jet Set Radio Future | Documentary](#)

Jet Set Radio indie Sequel: [Jet Set Radio 3: The Lost Sequel | Documentary](#)

Development of Zelda Wind Waker

[The Development of the Wind Waker](#)